

WHAT IS CLAIMED IS:

1. A vehicle headlamp apparatus comprising:

optical axis direction changing means for changing the  
direction of a light-emitting optical axis of a headlamp of a  
5 vehicle;

a sub-control circuit provided integrally on the headlamp  
for controlling the optical axis direction changing means; and

a main control circuit for sending out to the sub-control  
circuit a control signal for changing the direction of the  
10 optical axis of the headlamp,

wherein the sub-control circuit comprises a power-on  
resetting circuit for implementing a reset by switching on and  
off a power supply, and

wherein the main control circuit comprises power supply  
15 control means for temporarily cutting off the supply of power  
to the sub-control circuit when the main control circuit detects  
an abnormality in the sub-control circuit.

2. A vehicle headlamp apparatus according to Claim 1,

20 wherein the main control circuit makes the power supply control  
means to continue to maintain the power supply cut off state  
when the main control circuit repeatedly detects an abnormality  
in the sub-control circuit after the power supply control means  
has been activated.

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3. A vehicle headlamp apparatus according to claim 1,  
wherein the main control circuit sends out a request-a-reply  
signal to the sub-control circuit and activates the power supply  
control means when no appropriate reply signal to the  
5 request-a-reply signal is sent back from the sub-control  
circuit.

4. A vehicle headlamp apparatus according to Claim 1,  
wherein the main control circuit activates the power supply  
10 control means when a reply signal is sent thereto from the  
sub-control circuit to which no request-a-reply signal has been  
sent out therefrom.

5. A vehicle headlamp apparatus according to claim 2,  
15 wherein the main control circuit sends out a request-a-reply  
signal to the sub-control circuit and activates the power supply  
control means when no appropriate reply signal to the  
request-a-reply signal is sent back from the sub-control  
circuit.

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6. A vehicle headlamp apparatus according to Claim 2,  
wherein the main control circuit activates the power supply  
control means when a reply signal is sent thereto from the  
sub-control circuit to which no request-a-reply signal has been  
25 sent out therefrom.

7. A vehicle headlamp apparatus according to claim 2,  
wherein a fail safe is executed in which the optical axis is  
reset to an initial position when the power supply is maintained  
5 in cut off state.

8. A vehicle headlamp apparatus according to claim 1,  
wherein the light-emitting optical axis of the headlamp is  
changed in its direction horizontally according to the steering  
10 angle of the steering wheel of the vehicle.

9. A vehicle headlamp apparatus according to claim 1,  
wherein the optical axis direction changing means and the  
sub-control circuit are integrally accommodated as a single  
15 unit.